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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,269	07/15/2003	Sandeep Bhatt	02077(3600-395-01)	8766
7590 Martha Ann Finnegan, Esq. Cabot Corporation 157 Concord Road Billerica, MA 01821-7001		01/02/2008	EXAMINER HENDRICKSON, STUART L	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/620,269	BHATT, SANDEEP	
	Examiner	Art Unit	
	Stuart Hendrickson	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21, 24 and 26-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 24 and 26-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The RCE is accepted.

The following applies to all rejections herein:

The Industrial Carbon reference is presented as evidence that as-synthesized carbon blacks meet the 325 mesh limitation, except for the 'poor' grades. Note also the sulfur values reported as typical. The Medalia article has extended discussion and pictures indicating that carbon black has a small particle size and meets the 325 mesh limitation. The concluding section teaches 1% ash as conventional. Iodine and nitrogen are shown to correlate by the Dee Snell article pg. 186 submitted.

Claims 1, 2, 4, 5, 7-11, 26, 28-30, 34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Van Konynenburg et al. 4775778 in view of Medalia article and Industrial Carbon.

The reference teaches in col. 6 and 13 Table 1 entries 8-10 carbon blacks having area and size corresponding to the claimed ranges, in so far as N₂ and iodine value correlate. Column 6 teaches the overall particle size (325 mesh is 44 micron, so the teaching of 80 nm meets the 325 mesh limitation). The reference does not explicitly teach the claimed iodine number, however the iodine and nitrogen values roughly correspond. Therefore, it appears that the product is the same. A polymer composition having 5-50% carbon black is taught; see col. 8, 15. The ash and sulfur values appear within the range of conventional carbon blacks.

Where the examiner has found substantially the same product as claimed in the art, the burden is upon the applicant to show a difference; In re Fitzgerald et al. 205 USPQ 594.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Konynenburg.

The reference does not teach the kind of polyethylene, however teaches the genus. Using the claimed type of PE is an obvious expedient because it meets the requirements of the polymer needed.

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Claims 1-21, 24-30, 34-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Sant 5877250, in view of Industrial Carbon and the Medalia article.

The reference teaches what appears to be the claimed carbon black. Specification pg. 13 indicates that the present carbon black is the same as that of Sant, with no modifications made.

Claims 1-21, 24-30, 34-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Sant 5877251, in view of Industrial Carbon and the Medalia article.

The reference teaches what appears to be the claimed carbon black. Specification pg. 13 indicates that the present carbon black is the same as that of Sant, with no modifications made.

Claims 1, 4, 7-9, 25, 26, 29, 30 and 34-36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Thielen 5902517 in view of Probst et al. 5639817, Industrial Carbon and the Medalia article.

Thielen teaches in table 1 ENASCO 250 carbon black having area 65 and low volatiles content (which appears to meet the toluene extractables claimed since both represent low weight organic compounds) with a polymer. Column 1 indicates low primary particle size and a resin is taught (col. 2 line 30). Probst table 2 teaches iodine of 47 ('about 50'), DBP 160, CDBP of 92, for ENASCO 150 (apparently a similar carbon black, but smaller surface area-note the respective DBPs reported) and teaches rubber composition. Additionally, the iodine value appears possessed due to the general correspondence to nitrogen value. The 325 mesh appears met since carbon black as synthesized is a fine powder and the ash, sulfur values appear conventional.

Where the examiner has found substantially the same product as claimed in the art, the burden is upon the applicant to show a difference; In re Fitzgerald et al. 205 USPQ 594.

Claims 1-21, 26-30, 34-40 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22-53 of U.S. Patent No. 6852790, in view

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of Industrial Carbon and the Medalia article. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim common, overlapping, subject matter in the ranges of values.

The '790 patent elucidates in col. 3 overlapping particle size, and other properties. The polymers are indicated in col. 8.

Claims 1-10, 26, 29-33 and 41 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6482386, in view of Industrial Carbon and the Medalia article. Although the conflicting claims are not identical, they are not patentably distinct from each other because the numerical values overlap.

Column 4 teaches a tube shape and fluffy form, which indicates the 325 mesh limitation is met.

Claims 1-9, 11-17, 19-21, 24-26, 28-29, 34-36 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamazaki et al. 6025429 in view of Weaver et al. 5352289, Dickerson 4755371, Industrial Carbon and the Medalia article.

Yamazaki teaches in the entire document, especially ex. 6 and col. 11, examples of acetylene blacks having low ash and grit contents, and iodine values of 92 and 110. Col. 1 teaches polymers and col. 3 teaches the loading. This does not explicitly teach all the claimed properties, however Weaver teaches in col. 3 that acetylene blacks are known to be low in ash and S, which is expected because they are made from a source which contains little or no S or metals. Note also the DBP values recited. Dickerson teaches in column 6 the claimed 325 mesh residue for carbon black. The Industrial Carbon reference is presented as evidence that as-synthesized carbon blacks meet the 325 mesh limitation. Therefore, it appears based upon this additional evidence that the carbon black of Yamazaki renders the claims unpatentable. The particle size is unknown, but a difference should be shown.

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Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. 6025429 in view of Weaver et al. 5352289, Dickerson 4755371, Industrial Carbon and the Medalia article above.

The references do not teach the claimed pipe, however forming one is an obvious expedient to create an useful artifact made of the carbon and polymer with the desired properties.

Applicant's arguments filed 10/25/07 have been fully considered but they are not persuasive. Van Konynenburg teaches a host of carbon materials. Differences should be shown versus all which appear similar. Applicant is responsible for the content of the reference, not only that which is pointed out by the examiner. Differences should be demonstrated versus Sant, as well and this appears to be relatively easy to accomplish. The MMM technical Bulletin was not found. Industrial Carbon says that poor grades of carbon leave a high residue. See also Medalia. A difference should be shown in the primary particle size (or any other property not explicitly discussed by a reference) of Yamazaki; acetylene blacks can have particle sizes within or outside the claimed range. Concerning the JIS versus ASTM standards, 1% ash is 1% ash and it does not matter how it was measured; No patentable difference is seen.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.



Stuart Hendrickson
examiner Art Unit 1793